

FIG. 1

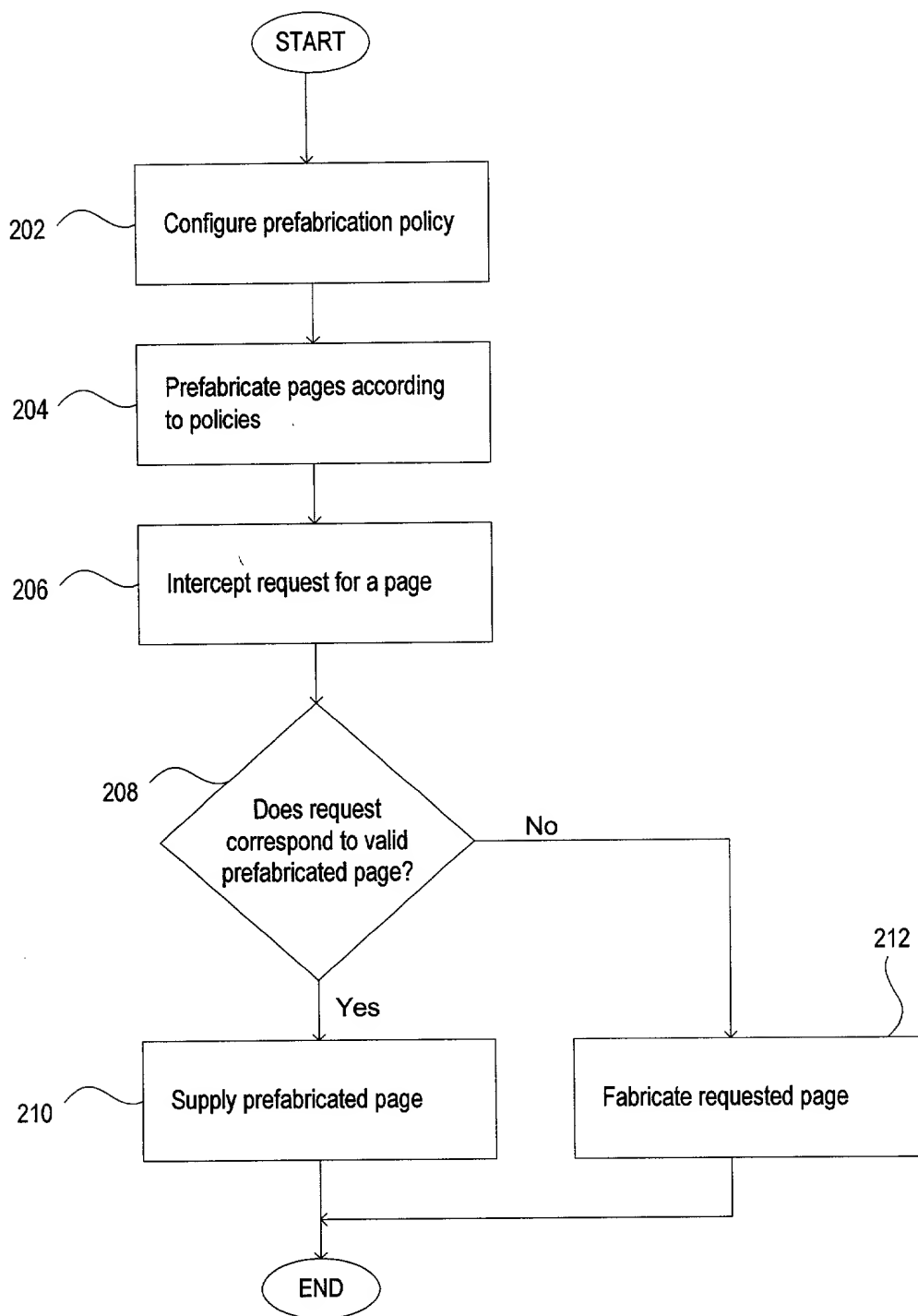


FIG. 2

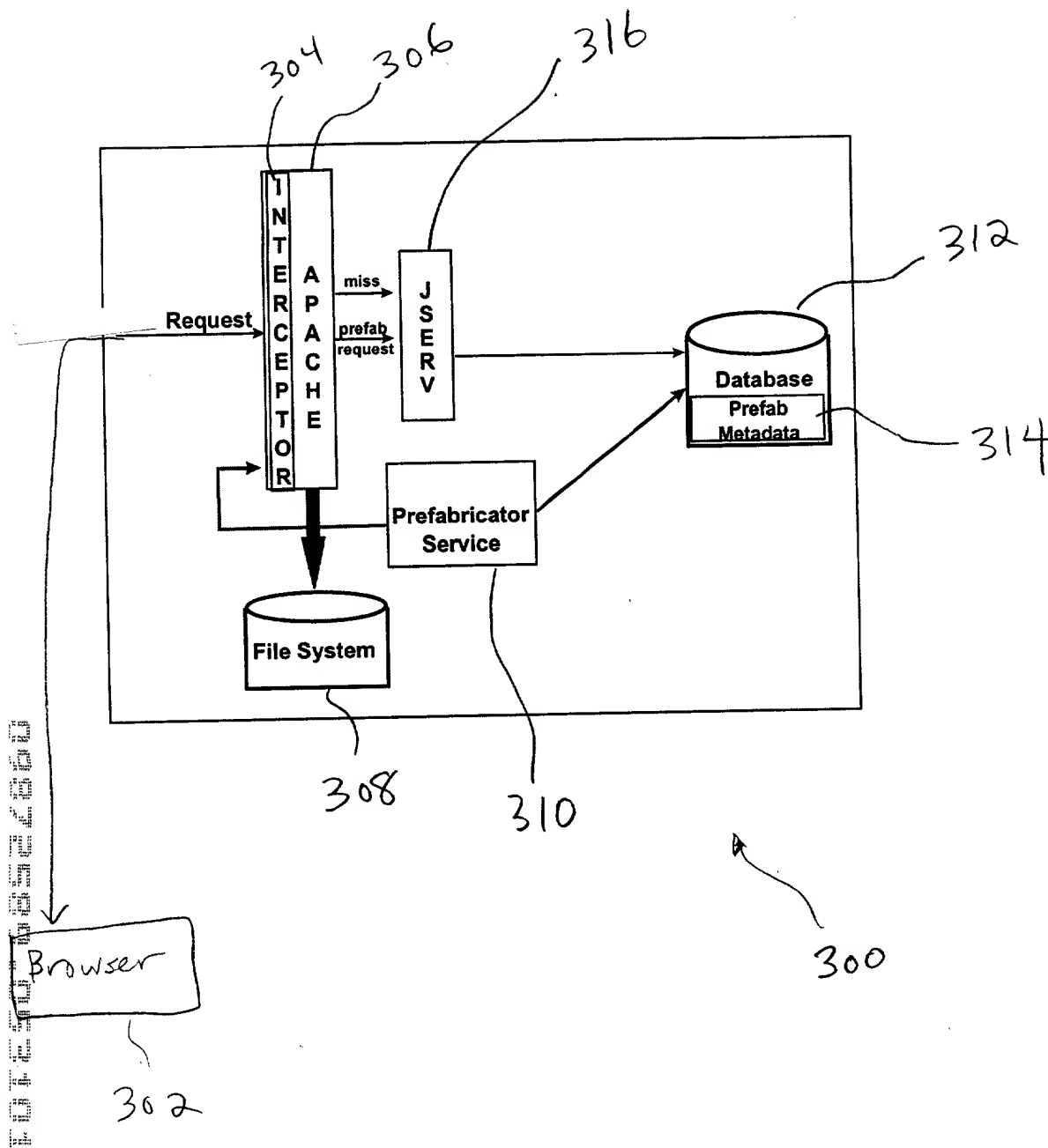


Fig. 3

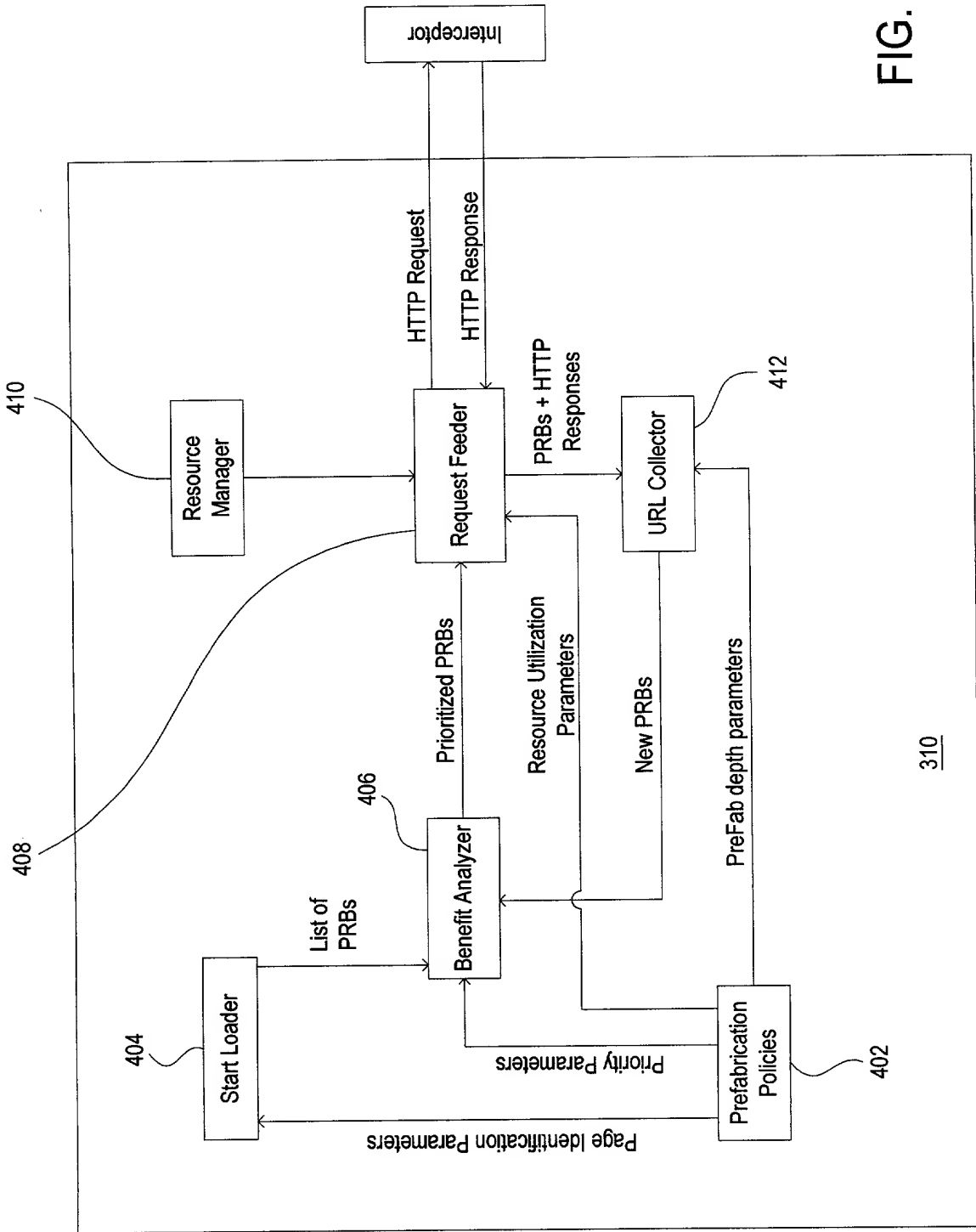


FIG. 4

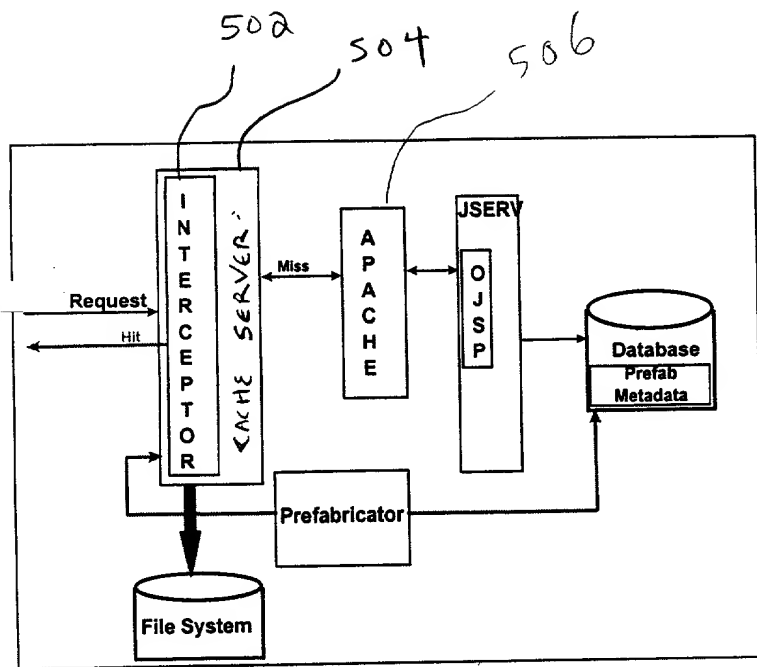


Fig. 5

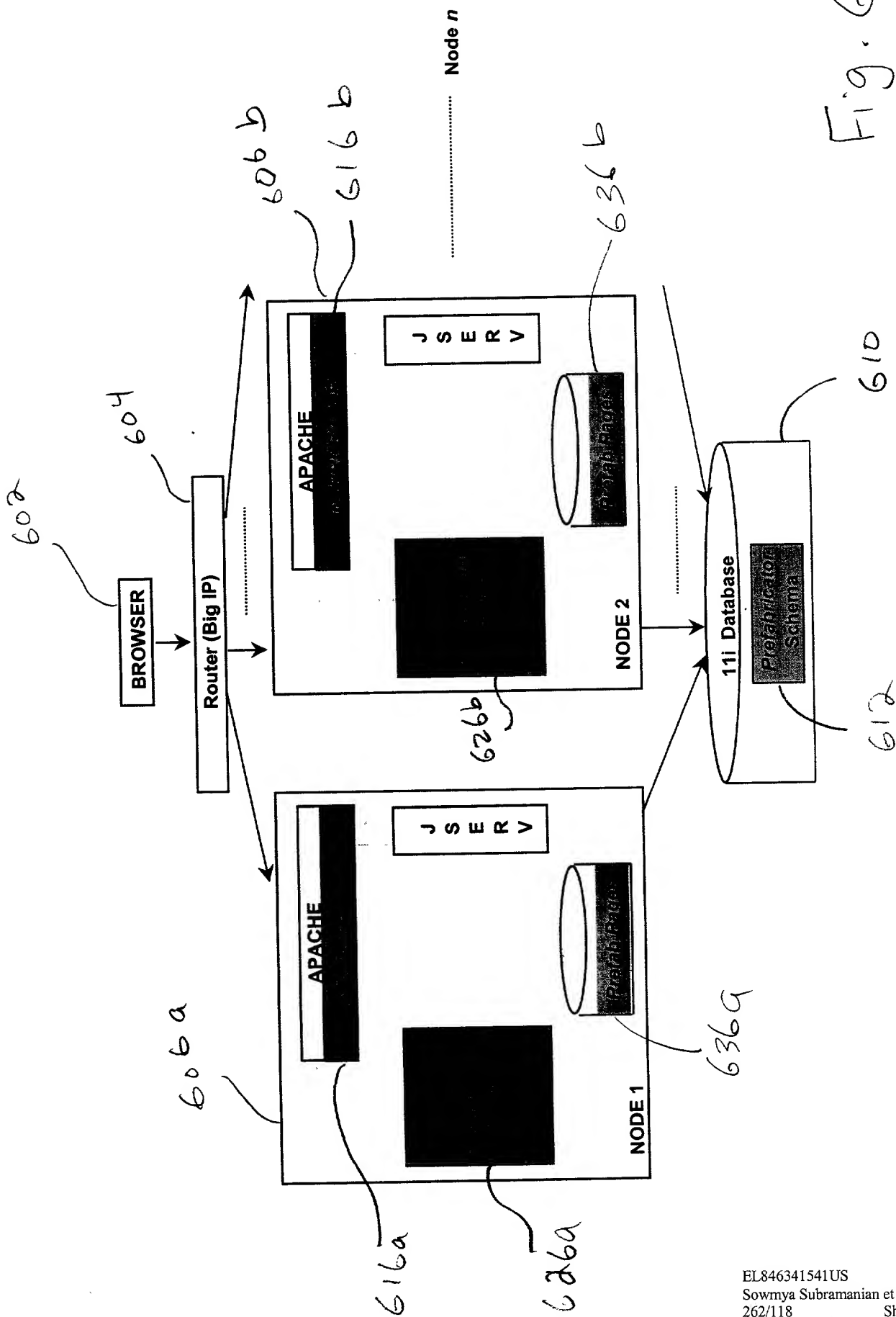


Fig. 6

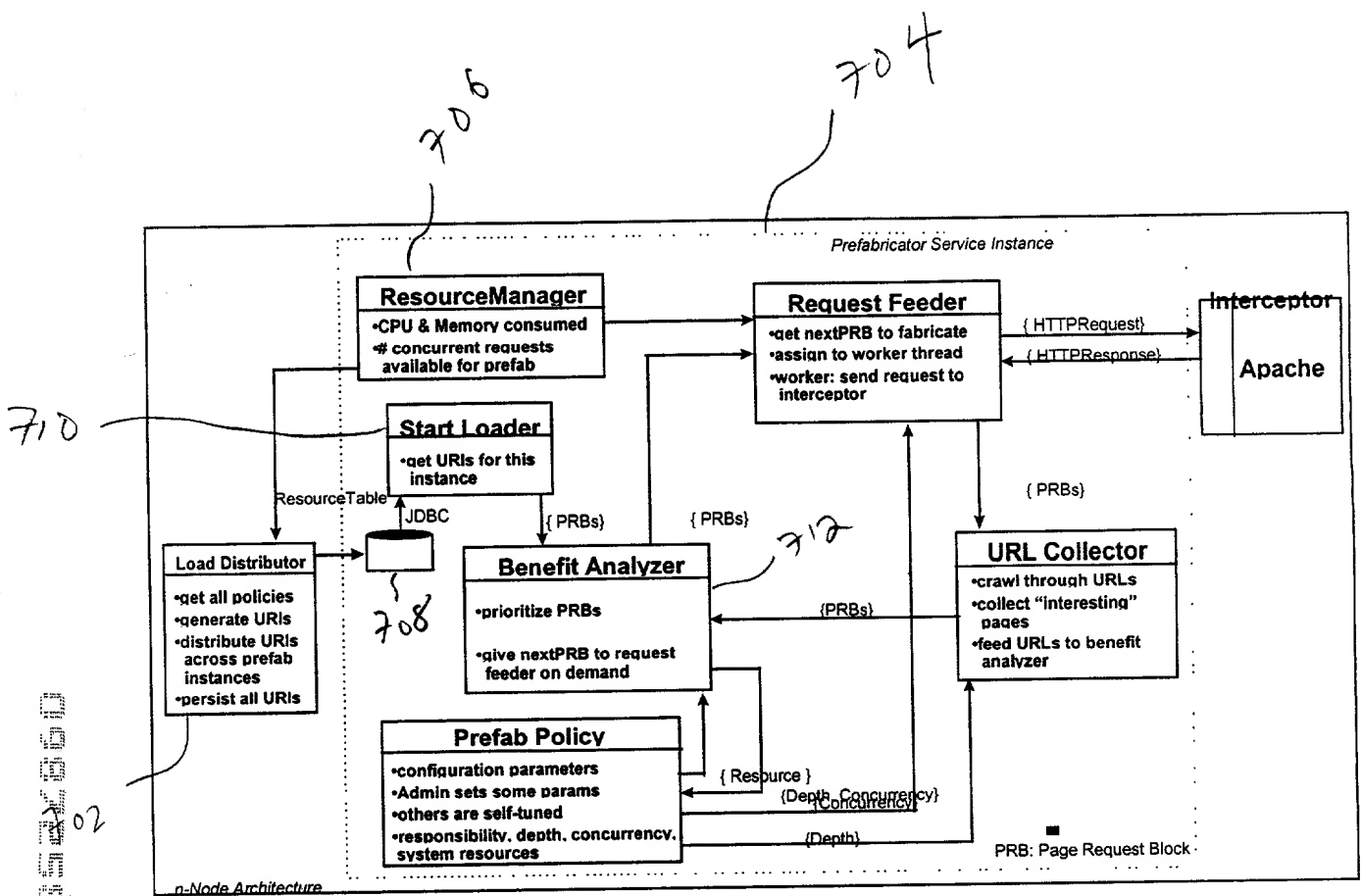
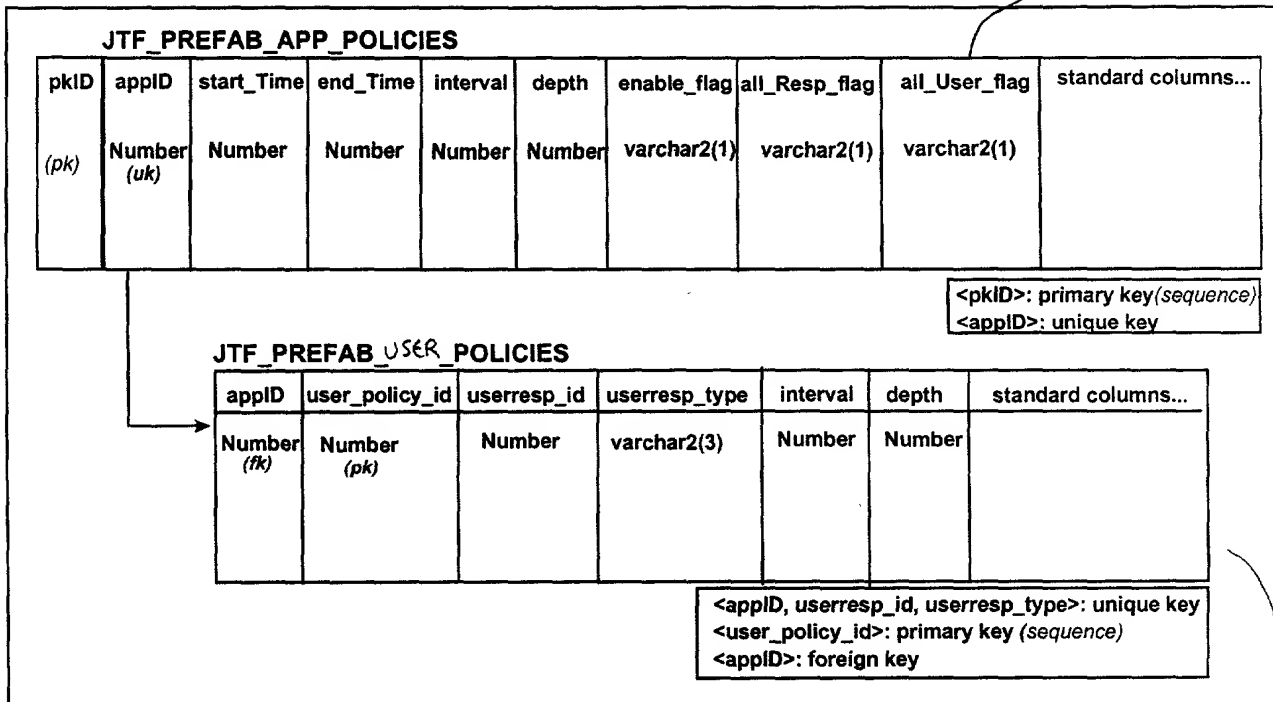


Fig. 7

Attribute	Data Type	Description
URI	String	URI that the request represents
userID	int	userID of the user this request belongs to
appID	int	appID this request belongs to
respID	int	respID of the user this request belongs to
depth	int	starting from the home page, the number of pages to be navigated before this URL is reached. A page is at depth 0 if it is the user's homepage, depth 1 if it is a page that can be reached directly from the home page, etc. Login page is at depth -1.
Weight	long	weight associated with this PRB
homePRB	PRB	PRB of the entry page to this application for the user
childrenPRB	Vector(PRB)	All the PRBs gathered from this page
avgGenerationTime	long	average page generation time
refCount	int	number of children PRB this has

Fig. 8

902



904

Fig. 9

Index Table	Description
weightIndex	Indexes PRBs according to their weights.
DepthIndex	Indexes PRBs according to their depths.
URISubStringIndex	Indexes PRBs according to their URI substrings. Now, the URI substring is defined as the .jsp name of the PRB (e.g. jtfavald.jsp).
IDIndex	Indexes PRBs according to their AppID, RespID, UserID combination.
URIIndex	Indexes PRBs according to their URI. Since this attribute is always unique, the data structure of this index is a simple HashTable of PRBs, instead of a HashTable of vectors.

Fig. 10

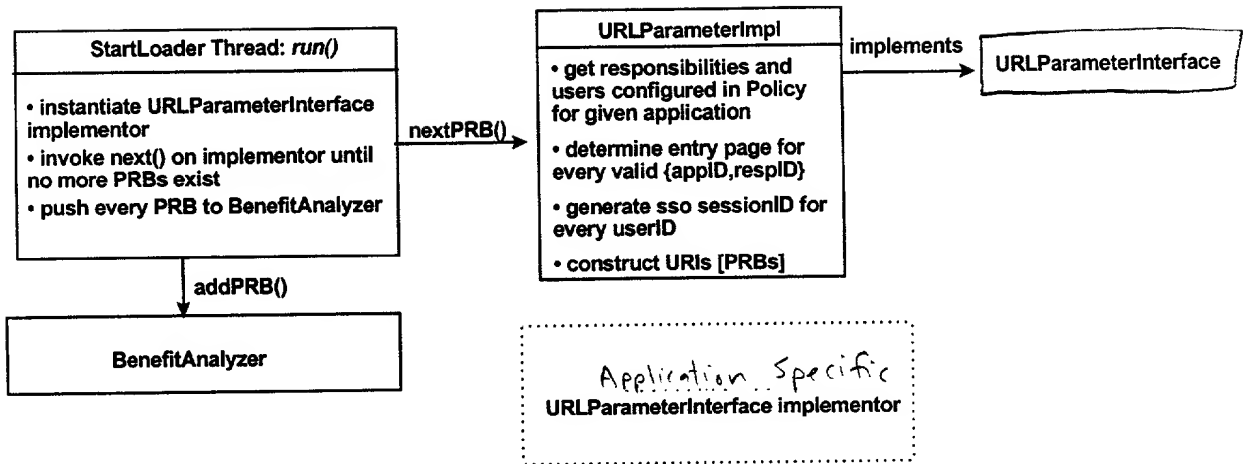


Fig. 11

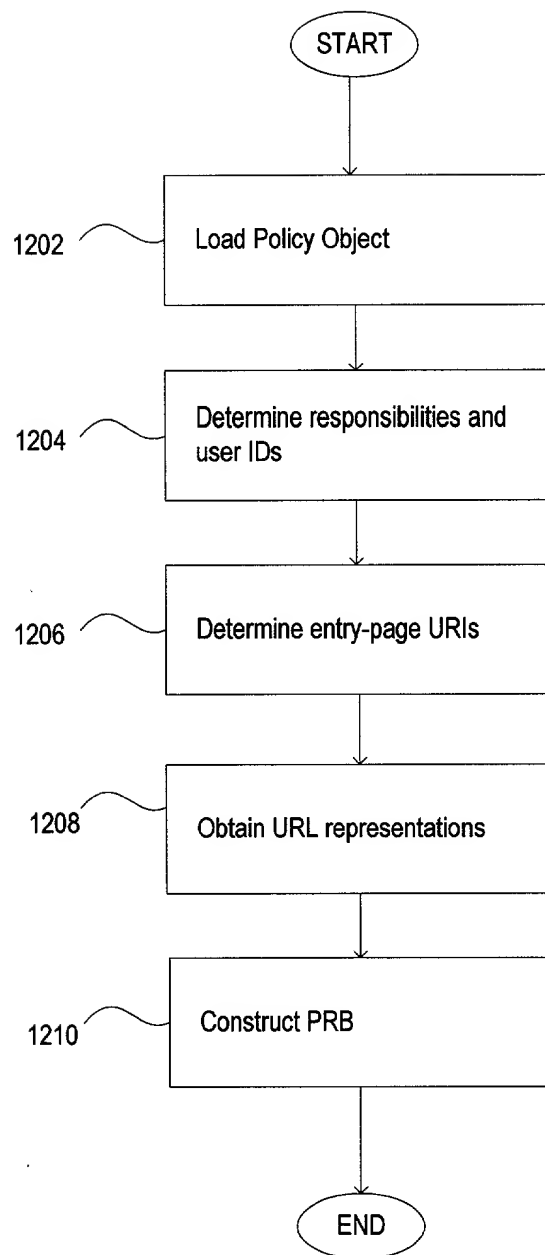


FIG. 12

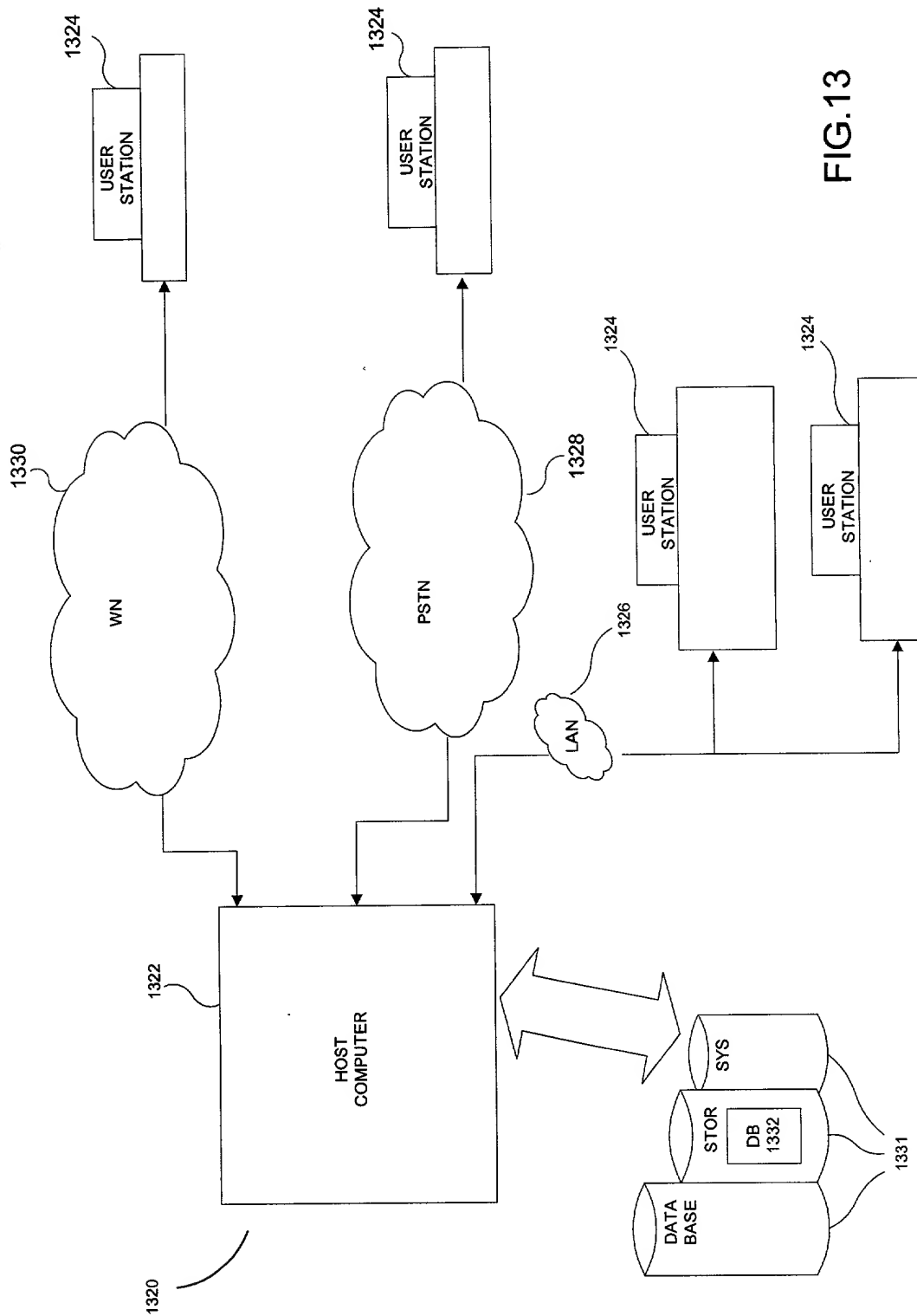


FIG.13

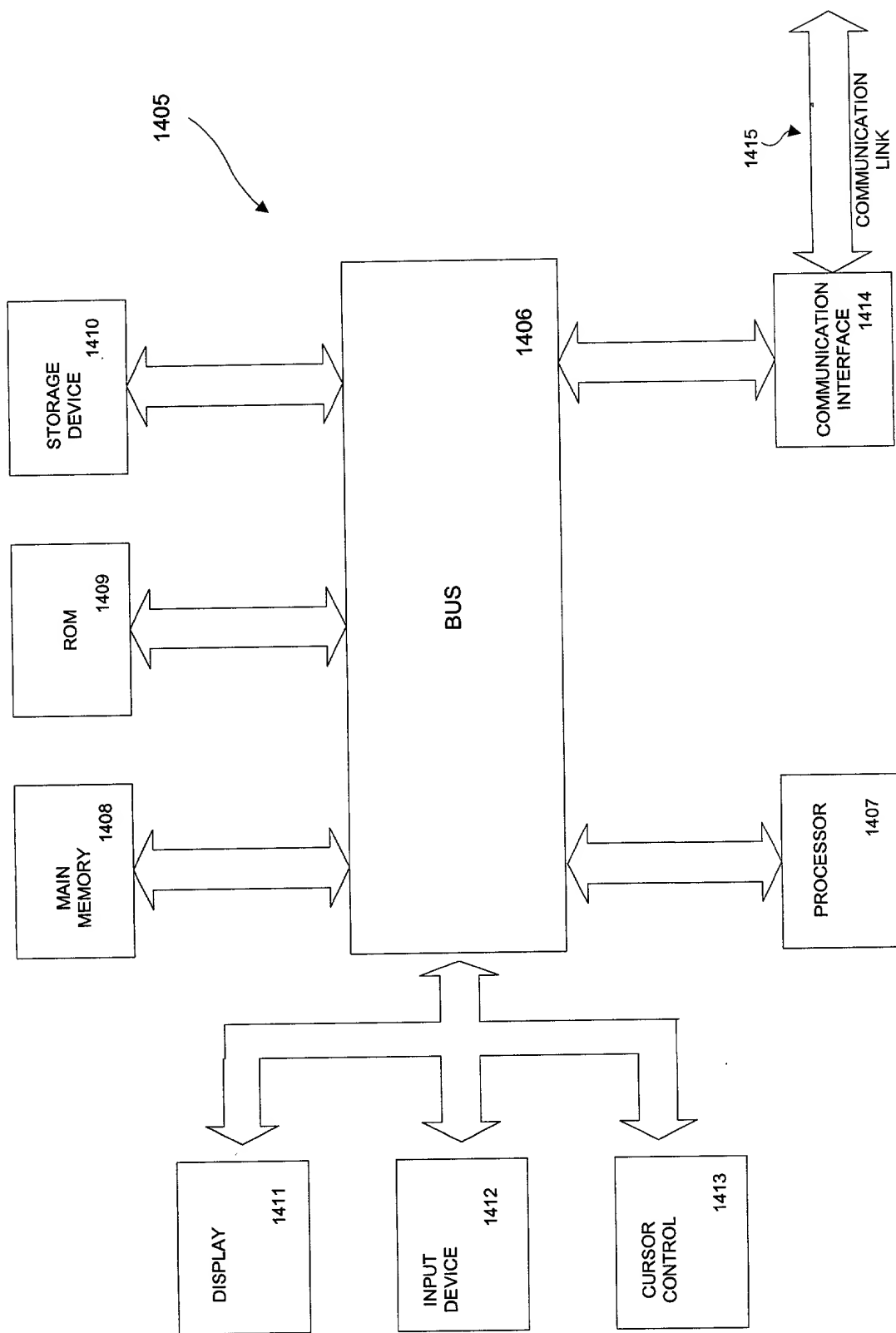


FIG. 14